

**Interview with Dr. Henry Heimlich (1920-2016) in Cincinnati, OH, 15 December 1994,
conducted by Jan K. Herman, Historian, Bureau of Medicine and Surgery.**

Where were you born?

I was born in Wilmington, DE, and spent my first year there. My family then moved to New Rochelle, NY. I went through high school in New Rochelle. I then went off to Cornell University in Ithaca. That year, my family moved to New York City.

I was drum major of the band at Cornell my junior year because that was my last year. I got into medical school after 3 years. I would have been class of '41 which I am, because the first year of medical school counted as the last year at the university.

In 1940 Cornell had the best football team in its whole history. We beat Ohio State that year.

It was my good luck to get into medical school after 3 years. That was pretty rare. I actually got into three medical schools at that time. I accepted Cornell because it was in New York City and we didn't have too much money. I could live at home.

Had there been a tradition of medicine in your family? How did you decide you wanted to be a physician?

My dad died a little over 5 years ago here in Cincinnati where he had moved at age 87. He was very well until he died which was 3 months under a hundred. He was 99 plus. He had been a social worker. My mother was also a social worker. They had a very poor background but he had gone through City College of New York, now the City University of New York, which was a free school. He had stuttered all his life and when he graduated college an older woman he knew said, "Phil, go out of town and don't let them know you stuttered and just take a breath before you talk." And he did. He went to Terre Haute to a small college there and taught drafting. He was very good in art and he partially supported himself doing advertisements for people.

But he was really a social worker and was primarily involved in prison welfare work. In the last year and half of his life he lived with us. He would tell me things I never knew those last few years. He told me he had gone into social work because he said that when he stuttered people were so nice to him that he decided to give himself to other people. I think he made \$2,000 a year full time. To do it he worked at night doing the advertisements, worked in the post office until he had a collapse putting in too many hours.

He and my mother were both very dedicated. The parole system came out of his work. He was very well loved, very highly thought of but never made much money. People would always tell me how wonderful my parents were.

He worked in the New York State prisons for an organization called the Jewish Board of Guardians, which is now part of the Jewish Federation in New York. He would visit Jewish prisoners in the state prisons. They would actually allow my sister and I to go with him. She was about 16 and I was 11 or 12. We could walk through Sing Sing Prison or Attica Prison unattended. We would sit and talk to the prisoners in their cells. When they had an auditorium meeting we would sit among them.

One time we went to the warden's office and there was a man visiting him who I think was a commissioner of corrections. He said, "How do you let these children go through the prison alone?" And the warden said, "Oh, all the men know they're Phil Heimlich's kids." And nothing more had to be said.

I said to him in that last year and half, "Dad, you went through college when no one else did. You could have become a major business man and then given your money for these charities. Do you ever regret not doing it that way?" He said, "Hank, I've had everything I wanted, what would I do with more money?"

So it was this idea of service that got you interested in medicine?

No. It was the antisemitism of the times. You have to remember that even when I was going through medical school before the war, the biggest indoor Nazi rally in all history took place in Madison Square Garden. And I was outside at that time. If you were Jewish in this country, you could start your own business but you could not get a corporate job or a government job. The only thing you could do that had real prestige was to become a doctor. Perhaps that fact alone made me reach out to other people. There were quotas how many Jews could get into a particular college. Blacks couldn't get in at all. It's true there were exceptions but they were very, very rare.

How did you get involved with the Navy?

Some time after Pearl Harbor if you wanted to continue medical school, you had to join the Naval Reserve or the Army Reserve. I became an ensign. We were not paid but were allowed to continue medical school. In 1943 they started the V-12 program. I then resigned as an ensign and became a V-12 midshipman. In June 1943 I got orders to attend Cornell as a V-12 midshipman and I went on duty on July 1, 1943. I hadn't yet graduated medical school. I remember they cut out summer holidays so instead of graduating from medical school in 1944, I graduated in the class of December of 1943.

Then you got to stay at the Cornell Medical School because it was one of the designated V-12 schools.

That's right.

Did your life style change at all. I know at some of the other V-12 schools they had special dormitories for the students.

No, I still lived at home. Once a week we had marching drills and we had to wear a midshipman's uniform. The V-12 program made life a bit easier because before, when you got on a bus, the driver would insult you because you weren't in uniform and presumably not serving in the military. In the Naval Reserve, you didn't wear a uniform.

In November 1943, I was appointed lieutenant jg, U.S. Naval Reserve. In December I was ordered to the V-12 unit headquarters at Columbia University in New York where I took the oath as lieutenant jg.

At graduation I went into the inactive Naval Reserve without pay in order to take the 9 months of internship you were allowed.

I then took a surgical internship at Boston City Hospital and finished at the beginning of September and was then ordered to active duty. My first orders were to the Chelsea Naval Hospital on October 10, 1944.

After being there a week, I was ordered to the U.S. Naval Station in Portland, ME. There had been a mistake in my orders. I was really supposed to report to the Naval Receiving Station in Casco Bay.

What did you do there?

I was the doctor at the Receiving Station. I mostly did examinations. In December I was ordered to the Chief of Naval Operations in Washington, DC, and in January reported in at Washington.

Where did you actually report?

I believe it was in the Main Navy building on the Mall. I lived in a hotel and was in Washington about a month. Each weekend I took a train to New York and see my family.

Shortly after arriving in Washington, I was taken into a room with two officers. "All we can tell you about this duty is that it is voluntary, and it's extra hazardous overseas duty in China." And that's all they could tell me and that's all I knew until I got to China. I remember thinking that if I was going to get it, I'd rather see China than some landing beach. And so I took the assignment.

I got my inoculations the next day. About a month later I received orders to proceed to U.S. Naval Group China.

How many of you were there?

There was George Basham, a commander who was in command of the group. The others were enlisted men.

Were there corpsmen?

Yes, some corpsmen but really quite a variety of other specialties--radiomen, scouts and raiders, and marines. I would guess there were about a hundred of us. I remember we took two sittings in the dining car. We left from the railroad station in Washington on February 17th bound for San Pedro, CA. We rode in freight cars with multiple bunks going from the floor to the roof. When we got to Los Angeles I called my sister who was at a nearby base. She had been at Quonset Point, RI, in Oklahoma at a Navy air base, and then in Los Angeles. In fact, she was in the group that helped break the Japanese code.

We then went down to San Pedro and on February 26th we left aboard the USS *Admiral W.S. Benson*. We were about 25 in one room. I got sick as a dog for 12 days right after we left San Pedro.

Did you travel in convoy from California?

No, we traveled alone. These ships were very fast compared to submarines. On the way out of San Pedro, the ship's crew took anti-aircraft practice on a towed target. When we got a direct hit, all of us just yelled with glee. When we were out for a few days, we encountered an identified ship and had to go to quarters. As a doctor, I had to go down in the hold and open an emergency medical unit there. It turned out to be an American destroyer. We then stopped in Melbourne, Australia for 48 hours, where a bunch of us officers slipped off the ship, only to see a guard at the exit. So we got cold feet and never saw Melbourne.

We arrived in Bombay March 29, 1945, 5 days over a month after leaving San Pedro. We remained there 3 days before taking a train which went completely across India for 4 days to Calcutta. It was a marvelous trip for us, the officers. We had a private compartment with its own toilet. The poor noncoms got what the average Indian got which was wooden benches in an open car which they both sat and then slept on.

The train would stop if a cow was on the tracks and they stopped for us to get coffee. They pushed a steam valve and the water condensed in our cups. That way, we had pure, sterile water.

We arrived in Calcutta and reported to the commander, India unit of SACO (Sino-American Cooperative Organization) on April 2nd.

You were still with the unit you left Washington with?

Essentially yes. We then stayed at a military camp called Camp Kanchapara. The showers were outside the tents. Someone would see a cobra winding around the shower pipe and everybody would run out to see it. I remember going down to the river where they burned the bodies. This was indeed primitive India. India was very depressing. The beggars were constant. A woman holding a baby's hand up for money. The people seemed to have no hope. On the other hand, I found it to be the most interesting culture.

By this time, did you know any more about your mission than you heard in that room back in Washington?

No, not a word. I stayed in Calcutta for about 2 weeks and then received orders to proceed to U.S. Naval Group China via commercial air transportation. I was to take a CNAC (Chinese National Airways Corporation) plane over the "Hump."

As you proceeded on this journey to China, from time to time you would receive new orders. It was a step by step procedure.

Yes, I never knew what was coming next. On April 17 I was designated an official courier for the purpose of transporting official U.S. Navy communications from Calcutta to commander U.S. Naval Group China in Chungking. The reason they made me a courier was to allow me to carry on the plane mail and materials they needed in China. Until that point, I traveled in a gray or khaki uniform without insignia.

The CNAC was flying old C-47s over the Hump. As a regular passenger you couldn't take very much luggage but because I was a special courier I was allowed to take large bags of stuff.

Did you have any medical gear with you?

No. Just my personal things and this large shipment of things. As a doctor, I wasn't supposed to be armed. But I was loaded down with I can't remember how many guns--side arms and carbines. These were desperately needed in China.

Did you have any idea what was in the bags?

No idea whatsoever. Before boarding the plane, I had to check through immigration and they were mad as hell because they knew this courier thing was a line. They had seen it time and time again and couldn't do anything about it.

We left Calcutta and then came to another airfield closer to the Hump, where I got aboard another C-47. The windows had holes in the middle, presumably so if we were attacked we could shoot back with our rifles. All that nonsense didn't make any difference because when we got to a certain height I began gasping for breath and then passed out, as we all did. Only the pilot and co-pilot had oxygen. We had to climb over 17,000 feet to get over the hump. I got to see a little

of the Himalayas before I passed out. The next thing I knew my eyes suddenly popped open and there were rice paddies all around on the mountains.

First we landed in Kunming, which seemed like a little village. There were some Navy people there and a substantial Army presence there. Last April, I went back to Kunming and it was a city with huge skyscraper hotels and so forth.

Since we couldn't eat on the plane, we had a meal there and then we took off for Chungking. The airport where we landed was a small sand island in the middle of the Yangtze River between the hills. Then I boarded a sedan chair with a guy in front and one in back and climbed many, many stairs to the top where they dumped me on the street with my bags and my guns. I remember the children laughing at me and coming over and touching the guns. Suddenly, I felt I was back in America. When I was in India, even for that short time, you lose your spirit; you don't laugh. The poverty and misery was just so overbearing.

The Chinese then were more animated.

Yes. The Chinese are more like Americans than any other people I've ever known. Here were these happy, laughing kids, and suddenly I felt like I was home.

Finally someone from the SACO headquarters came in a jeep and picked me up. They then took me to a place called Happy Valley which was the SACO headquarters. There were mountains all around. Again I was taken to a room with two officers and they explained what SACO was all about. The Sino-American Cooperative Organization was a pact between the Chinese Nationalist government of Chiang Kai-shek and the Navy. In the pact, the U.S. was to get weather information, aid in direction finding, intelligence information, and sabotage of Japanese targets in return for which we provided guns, material, training schools for guerrillas, medicines, and medical care. We were also to complete a large hospital near the Japanese occupied coastal areas ready for an eventual American invasion. We actually had a tent hospital with several hundred beds all ready to move in once the invasion was scheduled.

Where would the doctors come from?

They would already be in China and ready to staff the hospital. But it never came about because an invasion of China proved unnecessary.

So, the first time you heard any of this was at this meeting at the Happy Valley headquarters?

Yes. With the whole story.

You must have been incredulous when you heard all this.

No. Not at all. I was a young guy in the Navy and it didn't seem strange at all.

What was your specific role.

I had come to China to replace a doctor at one of the Navy camps in the Gobi Desert, Camp Four in Inner Mongolia. His name was Gene Nabor and he had broken a tooth in a basketball game. The Americans and Chinese in these camps would play fierce basketball games.

What was going on in Mongolia?

I didn't know until I got there. I got my orders to go to Naval Unit 4 on April 21st. I got another CNAC flight from Chungking to Lan Chou? in northwest China. While I was in Lan Chau, I met a lieutenant Angus A. MacInnis. He was a weatherman and he was going to a place further west to set up a weather station with two other men. We had an old Chinese owned Dodge truck. The truck was loaded with stuff. The first layer was gas drums to fuel the truck. Then there were the things the driver planned to sell when he got where he was going. Then came whatever we were carrying. And top of all that we spread out our bedrolls and sat on them outside the truck. The truck broke down and the driver took the engine completely apart, put it back together and then it worked. Then we went to Penglian and the men set up a weather station there. Weather information was then radioed to Chungking, and then relayed to our ships in the Pacific. We also had coast watchers who would radio that a tanker just departed from Shanghai, for example. Then our subs could be in a position to intercept it.

A week or two ago I met an old retired submarine commander, a Medal of Honor winner. During the war, he was called "the galloping ghost of the China coast.

Eugene Fluckey.

Yes. We began talking about service in China and I said, "Did you know Mary Miles?" And he said, "Oh my God! I got all my weather and coast watching reports from him." He was absolutely floored by this. We were providing this information.

So SACO was weather, intelligence, and it was a guerrilla army.

So the basic function of SACO was to provide whatever basic assistance the Chinese needed to fight the Japanese in exchange for the weather stations and coast watching intelligence.

That's correct.

Where was the station?

We went up to Peglian. It was a walled-in city, just like Peking. They were amazing to behold, these walls were higher than you would imagine. You couldn't drive car or truck in because the gates were so tight. At night the farmers would come in from the fields, so the cities would be teeming.

We had a week in Peglian and then we were off to Neechsha, a province run by a warlord, Ma Ung Way. When he converted to Islam, everyone in the province became Muslim. Even today there remains a Muslim community. He had beautiful guest quarters. He often took us to the Neechsha Opera, a wonderful opera company.

He didn't let his people drink due to his religion, but he had the best rose wine you could imagine. We got all we wanted. We also got white wine, called Ba Jei Ho.

He also threw large banquets. Of course, I learned not to ask what I was eating after I asked once and discovered I was eating mouse embryos. Some banquet had up to 20 courses.

What was his connection to Chiang Kai-Shek?

None. He was a Nationalist and he had his own army, but he was an independent warlord. He escaped to California when the communists took over.

Who else was traveling with you?

Angus MacInnis, Taylor, Klaus, and Young.

Who was responsible for the weather station?

That was Angus McInnis, he would set it up with two of the guys.

Did you have any medical equipment?

No. I didn't have any medical duties, I was simply traveling to get to Camp Four. During this trip we also picked up an American flyer who had been shot down. He was with General Chennault's Flying Tigers.

Did you have Chinese guides?

Yes. We had Chinese guides and drivers. But we didn't have interpreters, so we communicated with sign language.

Was there any Japanese activity?

No. This province was way out to the northwest and the Japanese didn't want it. We were so far out, we saw the end of the Great Wall of China. Most of the people were insulated from the war.

We also visited the tomb of Genghis Khan. His spear was covered with hair, each hair symbolizing someone he had killed.

Everyday was an adventure. Although we carried c-rations, most towns had restaurants.

When did you get to Mongolia?

Before reaching Camp Four we crossed the Ordiz Desert. We made it to Mongolia on 4 June and initially visited a Spanish missionary. They cooked marvelous food and had great wine. We also had to cross the Yalu River, which was hugely wide, on these little flat-bottom boats. We even got the truck across on these boats.

What did you see at Camp Four?

Well, the town is Shempa in Suyan Province, but it has a new name now and is also part of Inner Mongolia. It was another walled town and many glass windows, unlike the usual paper coverings over window holes, and adobe style. It had been a French mission.

My group originally had twelve members, thus our code-name was "The Apostles". But it grew to about 20 people, including a chaplain named LaSor. I reported to CAPT Hilliard, the CO, was sent to the doctor's room, and was assigned a horse.

A horse?

Yes, we all had horses.

What kind of medical equipment did you have?

Well, the doctor I replaced left all of his equipment. This is what we considered a two-year supply. We had sulfa drugs, but no penicillin. I also constructed a steam sterilizer out of a 5-gallon oil tin. I also had a still to make distilled water.

I very quickly went to the local coffin-maker and had him make me an operating table out of wood with iron hinges and ratchets so I raise and lower the head and feet.

There were 250 Nationalist Chinese guerrillas under a General Chao and General Lu. We had interpreters.

At one point we met with General Fu Tsu He, the warlord of that area and supposedly had a 100,000 man army. I never knew what he accomplished until I went back in 1988. His daughter and sister-in-law set up this trip to Inner Mongolia. I was the first foreigner to be allowed in. We came across the "Victory Bridge". It was where General Fu Tsu held the Japanese; he was the only one to hold the Japanese and actually overcome them. We stopped at a little restaurant. The villagers told us how General Fu had driven the Japanese out of this area. He said his father told me that the Japanese had taken away his two horses, depriving them of his ability to farm. When Fu heard about this, he gave his father the two horses, recently recaptured from the Japanese.

How many corpsman [Chinese?] did you have?

I had about twenty I was training. I had Jim Jordan as an interpreter. He was a Marine Captain. His father had been head of the British-American Tobacco Company in China. So Jim was brought up there and was fluent.

What were the other functions of the camp?

Well, a couple of our people were advising the Chinese guerrillas. But they were fighting mostly puppets of the Japanese.

I did my first experiment there on the disease trichoma. I thought sulfadiazine would work against it. I powdered some sulfadiazine and put it into Barbasol, the shaving cream. I had my corpsmen put some in each eye of an infected Chinese. The patients would roll in anguish and pain at first. But over time the trichoma cleared up. After the war, I discovered a study done by the military in Egypt had proven sulfadiazine was a curative for trichoma.

Why the Barbasol?

You couldn't put the powder directly in the eye. Barbasol was a convenient, clean medium.

You also treated some of the locals?

The first doctor up there, Goodwin, did an occasional surgery, but treated only a few locals. One evening, shortly after I arrived, a 18 year old girl came with a distended abdomen and severe dehydration. I didn't know whether it was a tumor or an infection. But I knew she needed surgery. As we didn't have electricity, I couldn't start a major surgery so close to nightfall. I decided to wait until the morning.

I took salt pills, sodium chloride, and tried to make a saline solution. Instead of intravenously, I put the water with hypodermoclysis, which puts the water into the subcutaneous tissue just above the muscle. This seemed to help.

If she had died our mission would have been jeopardy. Although her dad was not a warlord, the Chinese did not really trust us. I could have let her die, but instead I told her dad I would operate if she lived through the night.

I sterilized instruments and was assisted by one of my corpsmen. I gave her a spinal and gingerly cut into her abdomen. As soon as I hit the peritoneum, green and yellow pus gushed all

over us. I screamed with joy since this was the only thing I could handle. She had a pelvic abscess. I cleaned it out, left it open, and put drains in. She recovered.

From then on, I was mobbed by hundreds of patients. Everyone came to see me. I saw a lot of syphilis and many other diseases and inflictions that most American doctors would not see. It was one of the last areas of plague, both bubonic and pneumonic. It was a wonderful medical experience.

What about the communists?

We knew the communists were a strong force. We were up there several months after the war ended. Then we heard the 20,000 communists were coming our way. We felt the US government was leaving us there to get into the war with the communists.

So the war ended while you were at Camp Four?

Correct.

How did you find out the war was over?

We got the message that the first atomic bomb was dropped over the radio. We could hear the Armed Forces Radio. We all felt it was very promising. About a week later, we sent a regular message. The reply was the first ever not in code, "It's Over". We screamed and yelled.

The Chinese were horrified because now they were exposed to a civil war.

How long did you stay at Camp Four after the end of the war?

About two months. I got orders to Chungking and left on 1 November. In October one of our soldiers got shot accidentally during training. I did nothing the first night, just put on a bandage, because the light was really bad and I had never opened a chest before. It was a through-and-through wound and by morning he was near death. Therefore, I decided to operate. I found a huge hole from the entrance wound to exit wound, five to six inches. I found a three inch hole in one of his lungs and sutured it up. But closing was basically impossible due to massive amounts of torn tissues. Unfortunately, the patient expired during final closure. I always felt guilty; should I have ever done anything else.

On 7 October, General Wedemeyer flew in at night in a C-47. We illuminated the landing strip with fires and headlights from a truck and jeep. He wanted to hunt. But we took the opportunity to ask we hadn't left yet. We were still training Chinese soldiers, but not for the war against Japan. General Wedemeyer agreed that we should leave and told us we'd get our orders soon.

I later became a chest surgeon and developed a replacement surgery for children born with an esophagus. Essentially, I would bypass the defective esophagus with a tube from the stomach. It would grow into the esophagus.

In the early 1960s, I developed the Heimlich chest drain valve, a flat tubing. You put the tube through the bullet wound and pack dressing around it and the tube connects to the valve. Air, blood, and fluid can come out, but nothing can go in so the lung doesn't collapse. I presented it at the AMA at 1963. Four Naval officers came over and asked for six of them to take to Vietnam the next day. They were made by Benton Dickson by hand. We got together six of them. A week later I got a telegram saying the valve was a life-saving item and we must have 100 immediately. The company couldn't put them out that fast. Well after the Vietnam War, I

was at a meeting, Admiral Canada gave a reception. He said my valve saved lives and there were six Congressional investigations over why the military didn't use these valves. I couldn't get a patent on this, after all you can't patent a valve. In the late 1970s, the Patent Office called me and said they appreciated what I had done for the country and drew up a special patent for the valve. There a now a quarter of a million used a year, costing five dollars to save a life. I met someone at a meeting who was at Hill 881 (a ferocious Vietnam battle). He told 34 of our men were shot in the chest, 32 made it off the hill alive. What more do you want in your life?

A year ago March, I was with a group of heart surgeons in Vietnam as part of the People-to-People Ambassadors program. At the airport in Hanoi, there were Vietnamese doctors to meet us. One came up and said, "Ah Dr. Heimlich, everyone here knows your name." I figured it was the maneuver. Then he said, "Your chest drain valve saved tens of thousands of our people." I wondered how they got the valves. Apparently, the Quakers supplied the valves and they reused them. So I was saving lives on both sides without even being there. Why should I have been lucky enough to hear that? I have been given a great life. They kept repeating, "Dr. Heimlich will live in the hearts of the Vietnamese people forever."

And you had no idea?

No, none. None. Astounding. So I feel I've paid that soldier back. Maybe if I had known the drainage techniques then. He was always in my mind, therefore the chest valve.

What happened after you went back to Peiping?

Well, we got orders to get out, but I didn't make it to Peiping. Our Captain, CAPT Hilliard, was always drunk. I was worried he just didn't want to face the outside world. So I told him to give up duties as he was no longer capable or get us out of there. I don't know what pushed it, but we soon left.

Before we left I went to the town of Bao to treat a man. We arrived at night. I can remember the headlights hitting the walled city and the gate slowly opening. The Japanese were in the city, still armed, but they just jumped to salute us.

One place we stayed was along the caravans routes. I slept with my forty-five under the pillow. Another Marine came in and said "Are you going to turn in CAPT Hilliard when we reach Shanghai?" They had guns. I knew my gun would not hold me. I told them I had no interest in what he does as long as we were out of Camp Four. That is why I'm alive today.

Eventually we got to Chungking and flew to Shanghai. I stayed at the Park Hotel in Shanghai. I then went to Peiping on a tour at the end of November. On 10 December, I reported to the Repose (AH-16) for temporary duty. In January this was changed to permanent duty.

What do you remember about your duty on the Repose?

It was neat. I practiced surgery. We treated the whole fleet, even Allies. I remember treating British soldiers for smallpox. Apparently, their vaccine was no good. They invited us onto a British ship and was amazed they served scotch. We made one side trip up to Tsingtao to pick up 150 Marines with hepatitis jaundice and brought them to Shanghai. The *Samaritan* took them back to the States.

While I was on the ship, a sailor William Vincent Smith, was brought on. He had been on an LST and with two pistols began shooting other men. He picked off ten or eleven, nine of which died. When they tried to grab him, he stabbed himself in the belly with a knife. We operated him on the Repose. It turns out his father was friendly with Truman. As a doctor, I spent a lot of time with him. In 19 May 1946, I was ordered home, and I was supposed to escort him home. Of course, I had an armed guard with us. But his shipmates were waiting for him, so I was told if he doesn't make it, I would get court-martialed. Worse still, he was suicidal.

So I get on a C-46 with four corpsmen. Smith was strapped in a strait-jacket, in a basket. On Guam, he was put in a lock ward. I requested he be sent home to Navy Hospital. The CO decided to send me home. I then arrived at Mare Island, CA on 25 May and turned him over. I read a year later that he hanged himself at St. Elizabeth's in Washington, D.C.

Now you were back from China. What was your next assignment?

I was in a terrible position at that time. I had run out of money. I had a month's leave and went to visit my relatives. After that I had one more month of active duty, so I served on a tug boat in New York.

In 1952 I was recalled to active duty for the Korean War. My wife was six months pregnant with our first child. I didn't want any of it. She had a friend whose step-father was a retired admiral. He told me to go to my former commanding officer, a Navy Captain. He went through my orders and discovered a mistake. In the orders I had to report, they had figured my terminal leave didn't count, but it had. So I was 21 days over my obligation. Therefore, I did not have to go to Korea.

What did you do after you left the Navy?

I had to fight like mad to get a residency in surgery. I would hear the same thing everywhere, "We're sorry doctor, but we have to take our old doctors back first." So I went to the Director of Medical Education at Mount Sinai Hospital in New York, Isador Snapper, and his secretary told me to just leave a resume. I firmly said I wanted to see Dr. Snapper. She tried to give me the run around. So I just sat down and waited. A few minutes later Dr. Snapper walked out and I stood right in front of him and asked him for a residency. He said that since 50,000 doctors had been released by the military and I was one of the last, all the jobs were given away. I told him just to give me 15 minutes of his time. He invited me in. I recounted my experiences in China.

He asked, "What do you have if you have swelling of the liver and coughing up blood."

"A fluke has gotten into the liver and burrowed into the lung."

"Right. What would you do if you don't get this residency."

"Well, an internist offered me a place in his practice. I can't wait around trying to be happy in surgery."

He just said, "Promise me you'll do nothing for two weeks."

It turns out that before the war he had been the Director of the Rockefeller Institute in Peiping. Within a few days, I had an offer for a residency.

You began to learn chest surgeon. When did you realize you had the knack for putting ideas into practical applications?

Well, I was beaten down by professors at three universities. I knew the game called scientific slavery, where you have to put your professor's name on the paper. Everyone says that

came out of so-and-so clinic and he gets the credit. I didn't want to get into that. So I did the esophagus replacement operations at three different hospitals and they got down on me. I couldn't get advancements.

In 1971, I operated on a poor kid from Morocco who had swallowed lye and burned out his esophagus and larynx. I reconstructed his esophagus in two operations over 6 months. But he couldn't swallow. I realized that he had been fed with tubes for the last eight years so he might have forgotten how to swallow. I spoke with an obstetrical nurse who told me that premature babies sometimes didn't swallow. To get them started, the nurses would suck their fingers and then put the fingers into their mouths and they imitate the sucking. That is the first step in swallowing. So I did that with this kid. Within a week he was eating fine again. He also developed an esophageal voice, that is swallowing air and bringing it back up. I sent him back to Morocco. Unfortunately, that was one of the biggest mistakes. he died seven years later of an unrelated pneumonia. However, there were people who wanted to adopt him here. I was afraid because people would criticize me for not letting him go back. If he had stayed he would be alive today.

You're a household name because of the maneuver. How did that come about?

In publishing my medical article on the maneuver, I clearly said I wasn't sure it was going to work. We had done some experiments, but we weren't positive. The alternative was to do a tracheotomy. Actually, there was a report of a radiologist cutting his wife's coronary and killed her while trying to do a trache when she was choking.

Where did the article first appear?

Emergency Medicine in June 1974. A syndicated writer in Chicago picked up the story. The maneuver was originally called the subdyafirmatic pressure. The first life was saved within a week in Seattle. A restaurateur read the article and did the maneuver on a choking woman.

In August, I got a call from *JAMA* editors who wanted to call it the Heimlich maneuver in an article by them. Although I was then asked to write it for *JAMA* in 1975.

How did the idea germinate in your mind?

I had read the *New York Times Magazine* that the sixth leading cause for accidental death was choking on food, several thousands. I always thought it was a rare occurrence. I remember reading about famous people dying from this, such as Ethel Kennedy's sister or Tommy Dorsey.

I began looking into it and discovered the Red Cross was telling people the wrong thing, the back-slapping and putting fingers in the throat.

We practiced some maneuvers on each other to measure the pressure and the flow. Of course, it was the flow of air not the pressure that pushes the food out. The flow provides the kinetic energy to the object in the direction toward the mouth always.

The trick is to find a way for anyone to do it. You would die in four minutes so you didn't have time to wait for an ambulance. Actually, a six-year-old saved a five-year-old a few years later. This told me you can't make it any simpler than that.

The first experiments I did were on dogs. I had taken an endotracheal tube, blocked off the end, blew up the balloon and put it into the dog's larynx. I tried different way of pressing on the chest. So I went under the diaphragm and the tube and the balloon went out like that.

For twelve and a half years the Red Cross just let people die rather than admit they were wrong.

In 1957, I was in India and I had dinner with the British Secretary. One of the guests just served at the British embassy in China. I asked him if he knew General Fu Tsu He. He did. He told a story of how he was in command of all north China based in Peking in 1949. He was surrounded by Mao's forces. His daughter convinced him not to fight to preserve the cities. She went to Mao and arranged a cease-fire. Three months later, the war was over. He died in 1974.

In 1982 I was at the World's Fair in Knoxville. As a guest of the fair, I was taken around. I got into the Chinese Pavilion. The head there also knew of Fu Tsu He and his story. I sent a letter with him to his daughter. I received a response from her next year. She said "She had recently returned to Peking and met many of my father's colleagues. They could all remember you and praised you for helping us during the anti-Japanese War. You came to poorest northwest of China to care for our people and worries. We are all impressed by your spirit of self-sacrifice. We are very glad to know that you and your family plan to visit China. Please let us know when you are coming so I can arrange it."

For Christmas, we had her daughter, who was in school in America, come to us.

I went back to China in 1974 with my wife Jane. They gave us a dinner at the Great Hall of the People. They declared me a Friend of the Chinese People.

Getting back to your innovations, you talked about your experience with the wounded Chinese soldier. Now all of a sudden, the idea translates into this a practical application?

Well, usually it takes some time. This came to me while writing *Post Operative Care in Thoracic Surgery*. I was describing underwater drainage bottles. I found doctors don't really understand it. All this is, is a valve. It allows the air and fluid out of the chest and doesn't let it come back in. So I just took the idea of a valve and experimented with different types of valves. The flutter valve seemed to be the best solution. I got a Chinese noise-maker, with a rubber mouth. I corked one end and put a tube through it. Then I attached my noisemaker to it. I had a patient come in with pneumothoracic. I hooked it up to his chest tube and it worked. Armed with only that and a description of what it does I was able to sell it to Benton-Dickson.

I went to Eastern Europe in 1956, I was the first physician across the Iron Curtain. I performed my esophagus operation in Romania. So the CIA came to visit me when I got back. I became very friendly with these two guys. One of them knew the people at B-D. In 1963, we went to B-D and got a contract. The first real test came in Vietnam. The Navy got them first, but then the word got out and everyone seemed to want them.

In 1967, when the Israeli war broke out, I sent them a case. The Israelis sent a plane specially to the U.S. to pick them up. The Israelis had asked me for years to come and visit. Eventually I went in the 1970s. I went to the military hospitals and saw the Heimlich valves. The company can get an idea of where trouble is breaking out by who orders lots of these valves. For example, before the Gulf War, we got the biggest order ever of Heimlich chest drain valves.

This can be used for any collapsed lung?

Yes, it has many uses besides treating wounds. The beauty is that a patient can get home faster because he doesn't have to be in a hospital on drainage.

The chest tube is nothing special?

No, it's the valve that's really important.

The other valve you created for a tracheotomy?

It's called a microtrache. People taking oxygen are always gasping for air when given with the nasal tubes. Why? Because they have to suck air. I knew if you did a tracheostomy you would make it easier. If you put in a tiny tube under local anesthesia. Then jet the oxygen into the lungs from the tank, you don't have to breath heavily. With nasal prongs, you waste up to half of the oxygen back out the mouth and nose. With this tube, the air goes directly to the lungs. This also means the tank will last longer or it can be a much smaller tank. Therefore, the people are not tied down to a big tank at home and can get up and about.

How did that idea come to you? Was it at a traffic light?

Well, I saw a need for it. The doctors fight against these. They are afraid of something new. My saying is, "If all of your peers understand what you've done, you haven't been creative." They get along fine with what they have already.

Did you run into this same resistance when you developed the chest tube?

No. It was too dramatic and obvious. Although, a lot of doctors have not switched to it and instead of paying five dollars for a little valve, continue to spend 150 dollars for a cumbersome suction apparatus.

What about the maneuver?

Oh, I ran into terrible opposition from the Red Cross. It showed they had been wrong. It flew in the face of what they taught. And the doctors who advised them, fought it.

I'm going through the same stuff with drowning. You die of drowning because your lungs fill with water, except 10 percent who die of heart attacks before they breath in. You can't get air in, if the lungs are full of water. The Heimlich Maneuver has been show, quite accidentally, to empty the lungs. Gas and liquids are the same thing, its the same effect. I had no concept of it.

Less than two months after the *JAMA* article came out, a Doctor Esch, who was the chief surgeon for the D.C. Fire Department and an advisor to the Red Cross on water safety. He was at Rehobeth Beach when a man was brought in by the lifeguard. The lifeguard thought he was dead, but Dr. Esch did the maneuver. Water immediately gushed out and the man recovered.

Although that is just one anecdote, we have numerous more reports. The beauty of it is that a grandmother in Des Moines found her grandchild lifeless in a pool. She had seen the maneuver on a card so she tried it. The water gushed out and the kid recovered.

The maneuver seems to jump start the lungs and heart by pushing up on the diaphragm. This massages the heart. If they had been under water a long time, then it is worthwhile to commence mouth-to-mouth respiration. But its wasted if you do it while there's water in the lungs. The Red Cross has been responsible for hundreds of thousands of deaths. That's why they fight it.

It's an embarrassment?

Well, it's worse than an embarrassment. For the doctors it's ego. There's always resistance when someone comes in from outside. The Red Cross got the National Academy of Sciences to issue a falsified report in 1991 saying that the Heimlich Maneuver should be used only after you've tried mouth-to-mouth. They wanted to cover themselves.

In 1986, I was able to convince them to include the Heimlich maneuver. But the doctors there kept it out of their teaching manuals. Then we began collecting cases where if the maneuver had been done, the person wouldn't have died. Five hundred kids died a year during these 8 years.

In 1992, there was a drowning in a public swimming pool, the kid should have lived, but they had not been taught to do the Heimlich maneuver. Every time they blew in, the kid vomited because the air goes into the stomach. Finally, after four different paramedics tried mouth-to-mouth, one did the Heimlich maneuver and water gushed out. The kid's pulse came back, but his brain had already been damaged and he died a week later. Then I got mad. I raised a big fuss but the Red Cross fought me off. But in the course of fighting me they sent the city a copy of the National Academy of Sciences article. Every line in the article is phony. There are misquoting references and saying all the experts agree drowning victims don't have water in the lungs. They give three references that show 90 percent do have water in the lungs. Now if you argue with them, they say, "Oh well, all we're saying is that some don't have water in their lungs". They went too far. I threatened the National Academy of Sciences so they came out with a new committee. They produced an even worse report. I showed a Congressman these reports. Moreover, I showed an article in *Scientific American* which shows the National Academy of Sciences frequently has made decisions for the government and others based on who gives them money. The Red Cross had given them \$250,000 dollars. All the decisions made for White House, Congress or whoever can be falsified, and have been. This Congressman is going to instigate an investigation in 1995.

So this is an ongoing thing with the Heimlich Maneuver?

The drowning part is ongoing. But I'm doing a lot of talk shows now. There is organization in Washington called the Physicians Committee for Responsible Medicine. They're putting out publicity. I've got the two major life-guard organizations in the world to adopt the Heimlich Maneuver for drowning. By next summer, all I'm trying to do is implant in the minds of people, if you're faced with a drowning, know to use the Heimlich Maneuver. Even if CPR was any good, there are 256 or so million Americans. I think only 2 or 3 million really know how to use CPR properly. Most of them don't know or don't remember CPR. Everybody can learn the Heimlich Maneuver. But this is what I'm up against and I feel the responsibility.

I have been abused terribly on malaria therapy. A small group of nobody doctors with an assassins complex are criticizing it. First of all, it sounds so crazy; giving malaria to cure cancer, lyme disease and AIDS. Number one you use vivax malaria, which is 100 percent curable. Two, malaria therapy was used for 60 years in this country and Europe. It was successful in treating neuro-syphilis. Very well proven treatment. Best review was in 1984 from Harvard School of Public Health that it was very safe and curative. You have a malaria fever for three weeks and then you cure the malaria. But it had already wiped out the spirochetes that cause syphilis.

Was it the elevated temperature of the fever?

It was believed that for all the years it was used. It started in 1918. Van Johanring won the Nobel Prize for it in 1927. It was stopped in 1975 because it had done its job, neuro-syphilis had been wiped out. New cases didn't occur because penicillin could cure syphilis in its initial stage. They knew that had to be some form of immune reaction because sometimes the fever didn't go that high. They also tried to give the fever electrically, through a hotbox. But that did not do well. It came out subsequently in recent years that malaria causes the body to produce

immune substances, interleukins, interferons, etc in large quantity. We knew that malaria did not make AIDS worse and it was proven by the CDC in a scientific study. We learned from researchers that you get the same antibodies as AIDS and malaria. A paper published at the 1990 AIDS International Conference that 112 children had advanced AIDS, 41 also had malaria. After a period of time, those who had malaria and AIDS none had died. Of those, who only had AIDS 35 percent died.

So the possibility exists that malaria might have some benefit?

Yes. Also of interest in 1986-7, I was asked to present the use of malaria therapy treatment to the CDC. They approved of malaria therapy and offered to provide the malaria for the therapy. In 1988, the new director, Roper, was brought in. He was politically pressured to fight it. I have a letter from him and others there that entirely incorrect. He totally misconstrued an important reference to discredit malaria therapy. They would rather kill people.

I want to ask you about your institute. When did you start it? You said it developed out of the esophageal replacement operation. How did it all happen?

Patience. I developed the field of esophagus surgery. there was nothing before. So I saw everyone's problems. People who had been operated on up to 12 times before I saw them. One young girl had a ligid stricture. They brought the stomach up and attached it. But they always got reflex esophagialitis with that. They had put in a loop of duodenum. I went in and made a gastric tube out of the stomach. The operation was not to replace the esophagus. I read an article that when you resected the lower third of the esophagus and brought the stomach up and anastomosed it the reflux of the acid would cause the esophagus to get inflamed, ulcerated, and scarred again. In December of 1950, I heard a paper done on dogs where they had resected the upper stomach and joined the lower section to the esophagus. The lower part of the stomach does not create acid as the upper does. They could give the dogs acid stimulation but they would not get esophagitis. My concept was that if you could make a tube out of the greater curvature of the stomach and swing it upward you would be bringing the antrum up to the esophagus or the pharynx, which has no acid. I figured out how to get the blood supply up as well so it would grow in children.

When you started with this technique where were you affiliated?

I was an attending physician in three or four hospitals. I was just out in practice. I did a lot of ward service as I did not have much business initially. I had an outside office, but since I was a surgeon, I had to affiliated with a hospital. I wanted to get out of New York so I told two influential friends that I was interested in jobs as full-time director of surgery. I received offers from hospitals in Chicago and Cleveland which seemed to me to have the problems of New York without the benefits. Then I got an offer to become the first director of surgery at the Jewish hospital in Cincinnati. I came here with Jane (my wife). It has everything, a great symphony, opera, ballet, so forth. And sometimes, even baseball.

The doctors with the practices were against a full-time director of surgery. But there was a very dynamic President of the Board who wouldn't take any crap. So I took the job. I had part-time practice in the hospital.

I stayed for ten years. Actually after awhile it became boring; all the doctors with their complaining. But if I quit, financially I was nothing. I had to be let go to garner several years of

salary to support myself until I got going again. So I stuck it out for another year and a half until my next contract renewal. I was overjoyed when they decided not to renew my contract.

So then you started the Institute?

No, I always had the Institute within the hospital. But now I got a huge grant. After leaving Jewish I had no idea where I wanted to go. I was essentially giving up surgery at that time. A wealthy man had given me some grants along the way. I was talking about leaving town. We were having lunch one day and he asked what he wanted to do. I explained my latest research. He asked how much money did I need. I should have told him one hundred or two hundred thousand dollars. Instead, I said fifty thousand dollars. He said, "You got it!"

I said, "Hold on, I don't take a friend to lunch and then ask for money."

"You never asked for money before."

"Well that's true," I replied.

"Let me tell you the truth. I represent a group of people who don't want you to leave town."

To this day, I don't know whether to believe it or if it was just him. But it was such a moving thing, I couldn't leave town. He asked if I wanted to be in a college. He told me to meet him at Xavier tomorrow at 9 o'clock. They had already found me my office.

I stayed there for nine or ten years. I always had the Institute. Eventually, I changed the name to the Heimlich Institute. About four or five years ago, they were remodeled my building so I was forced out. I needed an office so I moved here on a temporary basis. But I liked it so much I stayed permanently.

So the Institute has operated from these offices for the past few years and the types of things you've pursued over the years have been the valve, the microtrache, the maneuver, malaria therapy. What else are you working on right now?

Number one, the malaria therapy and the drowning aspect of the Heimlich Maneuver are taking up most of my time. You're talking about creativity. But creativity is useless unless you can prove you're right. What good would the Maneuver do if no one would use it? The same thing is true with drowning. So I have to do the talk shows and so forth to get the word out.

I have my Caring World program, which is on hold. I also had a peace program which was very successful. I met with Malcolm Baldrige when he was Secretary of Commerce showing that peace could be obtained through trade. Everyone mixing up, no one goes to war. I also saw that the Soviet Union was a disaster economically. When the Camp David talks were breaking down in 1976. I sent a message to Senator John Glenn who passed it along to the Secretary of State the suggestion that Egypt should agree to sell the Sinai oil, which Israel had developed, for fair price. That went into the treaty.

If I could do it in a small area, why not in a bigger case between the United States and the Soviet Union. I'm not saying I had any effect, but I pressed very hard. I called the Computers for Peace to determine the economical models of them. When the Soviet Union finally collapsed it was the first time that peace was established between two major powers without a world war being fought. That's astounding. Moreover, very few protestors were killed.

The U.S. invasion of Somalia was the first time that a major power has invaded a Third World state to feed the people, not conquer them or make money. South Africa was the crux. Nobody thought they could have a free election and not have the blacks immediately attack the whites. Now we could be going to a caring world. People would not turn their backs on others in

suffering. What I am working on now is computerizing the world. This would let us know when something is about to break out so we can have a chance of prevent it. Once something has happened, it's impossible to stop. I have been lucky enough to have been given a platform. Last month I was attacked for the malaria therapy. Partly because I had received money from an AIDS group in Hollywood. Of course there are 125 AIDS groups in L.A. But the media generally only picked up the part about me working with malaria therapy; the bad part was dropped. I'm not an institution. We are supported by grants, generally from private foundations, and donations.